10/572,419

REMARKS

The Applicant thanks the Examiner for the telephone interview of June 23, 2010 concerning the above identified application. During that telephonic interview, the Applicant and the Examiner discussed suitable claim amendments which would overcome the raised the raised rejections, namely, amend each of the independent claims to recite that the scraper contacts the exterior surface of the control drum. This Response summarizes the distinctions and claim amendments generally discussed during that telephone conference.

Upon receipt of this response, the Examiner is respectfully requested to contact the undersigned representative of the Applicant to arrange a telephone interview concerning the inventive merits of this application.

Claims 49-51 and 53-66 are rejected, under 35 U.S.C. § 103(a), as being unpatentable over Miller `691 (U.S. Patent No. 4,524,691) in view of Belec et al. `015 (U.S. Patent No. 5,447,015), Button et al. `348 (U.S. Patent No. 6,199,348) and Baumann et al `185 (U.S. Patent No. 6,035,185). The Applicant acknowledges and respectfully traverses the raised obviousness rejection in view of the above amendments and the following remarks.

Upon reviewing the applied, the Applicant elects to slightly amend the independent claims so as to clearly distinguish over the applied art. In particular, each one of the independent claims 49, 65 and 66 is amended to emphasis that scraper contacts an exterior surface of the control drum to facilitate detachment and removal of the envelope from the vacuum portion of the control drum.

The Examiner relies on Miller `691 as allegedly teaching the above noted limitation, but it is respectfully submitted that Miller `691 clearly does not. A careful reading of Miller `691 reveals that there is no scraper or "stripper bar" contained anywhere within the entire description of that patent or within the nine accompanying figures—including Figure 6 to which the Examiner refers to in the office action. The Examiner posits that element 53 in Figure 6 somehow meets the scrapper limitation recited within the pending claims but the Applicant respectfully submits that element 53 in Figure 6 does not. More specifically, element 53 is a lower shaft cam follower 53, e.g., a deflector plate or wall providing a channel for envelopes to travel through on their way to the conveyor belt. It is respectfully submitted that the element

53 in Figure 6 is clearly spaced from the surface of the flywheel 36 and is more specifically designed for maintaining envelopes closely adjacent the flywheel 36, not scrape the envelopes off from the flywheel 36 as mistakenly alleged by the Examiner.

Upon viewing Figure 6 of Miller '691 and imagining that lower shaft cam follower 53 where to be used as a scraper, it is instantly apparent how this would generally incapacitate the functionality of the machine lower shaft cam follower 53. If, as envelopes were approaching, the upper edge of lower shaft cam follower 53 were tilted so as to "scrape" against the flywheel 36, the "envelope channel" created by lower shaft cam follower 53 would be closed, and instead it is respectfully submitted that envelopes would fall straight down from roller bar 47 generally onto the floor—see Fig. 7—without being stuff. Alternatively, if the lower edge of cam follower 53 was used instead, it is respectfully submitted that this would instead change the envelope channel into a dead-end which prevents envelopes from passing thereby and eventually causing a backup of envelopes. In view of the above, it is respectfully submitted that if the lower shaft cam follower 53 of Miller '691 were to touch the flywheel 36, it is respectfully submitted that such modification would generally constitute a detriment to and not an improvement for the machine of Miller '691.

In order to emphasize the above noted distinctions between the presently claimed invention and the applied art, each of the independent claims of this application now recite the features of "at least one scraper (25)....contacting an exterior surface of said control drum." Such feature is believed to clearly and patentably distinguish the presently claimed invention from all of the art of record, including the applied art. As Miller '691 fails to fails to in any way teach, suggest, disclose or remotely hint at the presently claimed feature of the "scraper....contacting an exterior surface of said control drum," and as Belec et al. '015, Button et al. '348 and/or Baumann et al '185 fail to cure or overcome the above noted deficiencies of Miller '691, it is respectfully submitted the raised rejection in view of Miller '691, Belec et al. '015, Button et al. '348 and/or Baumann et al '185 should be withdrawn at this time.

In addition, it is respectfully submitted that independent claims 49, 65, and 66 each further recite the limitation of "at least one stream of air being supplied by a rotary cam." The Examiner posits that the roller bar 47 of Miller `691 relates to a cam and, accordingly, it would

be obvious to combine the roller bar 47 of Miller `691 and the flap opening means 28 of Button `348 and such combination apparently somehow results in the above limitation. The Applicant respectfully disagrees with the Examiner's position.

First, the presently claimed invention specifically recites and claims a "cam" to be used to supply the air to the envelopes. Respectfully, element 47 of Miller `691 is a roller bar and not a cam. Moreover, Miller `691 specifically describes the bar as "a cylindrical, elongated, rubber coated roller," and depicts it as centrally mounted on the feed roller shaft 48. See column 5, line 41 of Miller `691. Further, Merriam-Webster Online Dictionary, 2010 defines a cam as "an eccentric wheel or a cylinder with an irregular shape." While the cam of the presently claimed invention is generally an "eccentric wheel or a cylinder with an irregular shape," it is respectfully submitted that the roller bar is neither eccentric nor irregular. That is, it is respectfully submitted that the roller bar has no relationship to a cam and a person of ordinary skill in the art would not look at the roller bar 47 and equate the same to be the rotary cam 14 of the presently claimed invention.

Second, it would not have been obvious to combine the *stationary* flap opening means 28 of Button '348 with the roller bar 47 of Miller '691 and, in fact, it is respectfully submitted that such combination may possibly cause the Miller '691 machine to fail or breakdown. The flap opening means 28 of Button '348 causes "[a]ir pressure [to be] *continually* exerted on the envelope reserve means..." Column 3, line 38 of Button '348 (emphasis added). Also, "[t]he flap opening means 28 is adapted to emit a stream of air directed toward the foremost envelope of the envelope reserve means 24..." Id. at column 7, lines 7-9. Observing Fig. 6 of Miller '691, which uses two suction cup toggles 34, 35 (one for each envelope) to remove envelopes from the reserve stack, it becomes immediately apparent why it would be counter intuitive to combine the two references as alleged by the Examiner—apparently improperly using hindsight and the disclosure of the above identified application. If one placed the flap opening means 28 of Button '348 so that it "emit[ed] a stream of air directed toward the foremost envelope of the envelope reserve means" of Miller '691, it is respectfully submitted that such combination would in essence incapacitate the machine of Miller '691. With this combination, it is respectfully submitted that a blast of air would now be blowing the envelopes *toward* the stack while, at the

same time, the a suction cup toggle 34,35 was trying to suck, hold onto, and pull the envelopes from the stack. Accordingly, the flap opening means 28 of Button '348 would generally work against the other components of the machine of Miller '691, e.g., generally hindering engagement between the toggles and the envelopes in the first place or possibly, once engaged, blowing the envelopes from the toggle.

Additionally, it is respectfully submitted that there would be no reason to add a flap opening means to Miller `691, as the machine of Miller `691 is used to load closed envelopes onto a printing press. Nowhere in Miller `691 does this reference in any way suggest stuffing the envelopes before printing them. Indeed, attempting to open the envelopes before printing them in a high speed press would may very well lead to a malfunction, e.g., why else would there be separate processes for loading envelopes to print, and then for loading envelopes to stuff. Indeed, it is respectfully submitted that adding a means to open envelopes up before feeding them into the printing press would probably be the last thing a user of the machine of Miller `691 would desire.

Third, even if Miller `691 could be properly combined with Button `348—which the Applicant denies, the resulting combination would still not result in or teach "at least one stream of air being supplied by a rotary cam for unfolding the closing flap," as presently claimed. In particular, it is conceptually difficult to imagine how the flap opening means 28 of Button `348 would be *mounted onto the solid roller bar 47* of Miller `691, see Fig. 2 of Miller `691, especially, since Button `348 teaches emitting a <u>constant</u> stream of air directed toward the foremost envelope of the envelope reserve means. The Applicant respectfully submits that the mounting of anything onto the bar 47 would generally impede close contact of the bar 47 with the flywheel 36, which is incumbent for the operation of the machine of Miller `691. It is to be appreciated that the bar 47 does not have any belts or gears, but is directly driven solely by rotation of the flywheel 36. The envelopes, meanwhile, once fed into the crevice or "nip" created between the flywheel 36 and the bar 47, are propelled by the frictional turning of the rubber roller bar 47. In the event that there is not close contact, it is respectfully submitted that the bar 47 does not rotate and the envelopes are not propelled by the frictional turning of the rubber roller bar 47 and simply pile up.

Even if there was a way to mount flap opening means 28 of Button '348 onto the roller bar 47 in a way that still allowed the bar 47 to remain in close contact with the flywheel 36, it is respectfully submitted any such mounting would generally interfere with operation of the machine. If one looks at Fig. 6 of Miller '691 and imagines that, somehow, a blast of air is constantly blowing out of roller bar 47, axially down the length of the bar in the direction of the of the reserve stack of envelopes, that same patently counter productive situation described above has been created. Just as the suction cup toggle 34, 35 is trying to suck and hold onto an envelope, the roller bar 47 will be blasting air in the general direct of the envelope, either preventing the envelope from initially engaging with the toggle or possibly blowing the envelope off of the toggle.

Next, if one continues to image that there was some way to add air blowing from the bar 47, taking into account that this solid bar rotates, it follows that if air were to blow out in any direction from the bar, it would somehow blow out all directions from the bar as it rotated. This means that not only would the blast of air risk blowing the envelopes off the suction cup toggle 34, 35 as it tried to grab and carry an envelope through such air flow, but if an envelope was successfully carried over the roller bar 47, the blast of air would almost certainly cause the envelope to be miss-fed into the crevice or nip between the flywheel 36 and the bar 47.

Finally, even given the above noted problems, mounting a flap opening means 28 onto the roller bar 47 would still fail to open an envelope flap, especially when the closing flap is initially closed and, as claimed in the presently claimed invention, "an outer surface of the closing flap faces a bottom of the storage bin." The bottom of the storage bin in Miller `691 would be the feed tray 3. See Figs. 6 and 7 of Miller `691. If the envelope(s) was positioned such that flap was at the top of the envelope (closer to number "3" in Fig 6), where "the closing flap faces a bottom of the storage bin," then the flap would generally be blocked from any air being blown from the roller bar 47, either by the feed try, as shown in Fig. 6, or by the envelope itself, as shown in Fig 7. On the other hand, if the envelope was positioned such that the flap was at the bottom of the envelop (i.e., closer to feeder tray 29), then an airstream being blown from the roller bar 47 would generally cause the envelope flap to remain closed, or possibly reclose the flap if it happened to inadvertently come open.

Lastly, as noted above, Miller `691 teaches the roller bar 47 to be in continuous contact with the flywheel 36. Indeed this must be so in order for the device to function properly; otherwise the roller bar 47 will not turn and the envelopes will go askew. In distinct contrast, according to the presently claimed invention, the rotary cam 14 only contacts the peripheral surface of the control drum 13 during a portion of each rotation of the rotary cam. In order to emphasize the above noted distinctions between the presently claimed invention and the applied art, newly added dependent claims 67-69 of this application each recite the features of "...the rotary cam only [directly] contacts the exterior surface of the control drum during a portion of each rotation of the rotary cam." Such features are believed to clearly and patentably distinguish the presently claimed invention from all of the art of record, including the applied art.

The Applicant acknowledges that the additional references of Belec et al. '015 and Baumann et al '185 may arguably relate to the features indicated by the Examiner in the official action. Nevertheless, the Applicant respectfully submits that the combination of the base references of Miller '691 and/or Button et al. '348 with this additional art of Belec et al. '015 and/or Baumann et al '185 still fails to in any way teach, suggest, disclose or remotely hint at the above distinguishing features of the presently claimed invention. As such, all of the raised rejections should be withdrawn at this time in view of the above amendments and remarks.

In view of the above, the Applicant respectfully submits that there is only one reason to combine Miller `691 and Butter `348, Belec et al. `015 and/or Baumann et al `185 in the manner alleged by the Examiner, namely, the impermissible use of hindsight after reading the specification and the claims of the above identified application. As Miller `691 in combination with Butter `348, Belec et al. `015 and/or Baumann et al `185 fail to in any way teach, suggest, disclose or remotely hint at the limitation of "at least one stream of air being supplied by a rotary cam for unfolding the closing flap" as well as the feature of "at least one scraper (25)....contacting an exterior surface of said control drum," it is respectfully submitted that the rejection in view of the applied combination of art should be removed and all of the claims are now in a condition for allowance.

10/572 419

If any further amendment to this application is believed necessary to advance prosecution and place this case in allowable form, the Examiner is courteously solicited to contact the undersigned representative of the Applicant to discuss the same.

In view of the above amendments and remarks, it is respectfully submitted that all of the raised rejection(s) should be withdrawn at this time. If the Examiner disagrees with the Applicant's view concerning the withdrawal of the outstanding rejection(s) or applicability of the Miller '691, Belec et al., '015, Button et al. '348, and Baumann et al. '185, the Applicant respectfully requests the Examiner to indicate the specific passage or passages, or the drawing or drawings, which contain the necessary teaching, suggestion and/or disclosure required by case law. As such teaching, suggestion and/or disclosure is not present in the applied references, the raised rejection should be withdrawn at this time. Alternatively, if the Examiner is relying on his/her expertise in this field, the Applicant respectfully requests the Examiner to enter an affidavit substantiating the Examiner's position so that suitable contradictory evidence can be entered in this case by the Applicant.

In view of the foregoing, it is respectfully submitted that the raised rejection(s) should be withdrawn and this application is now placed in a condition for allowance. Action to that end, in the form of an early Notice of Allowance, is courteously solicited by the Applicant at this time.

The Applicant respectfully requests that any outstanding objection(s) or requirement(s), as to the form of this application, be held in abeyance until allowable subject matter is indicated for this case.

In the event that there are any fee deficiencies or additional fees are payable, please charge the same or credit any overpayment to our Deposit Account (Account No. 04-0213).

Respectfully/subfaitted,

Michael Petijold Find No. 32,018 Customer No. 020310 Davis & Bujold, P.K.L.C. 112 Pleasant Street

Concord, NH 03301-2931 Telephone 603-226-7490

Facsimile 603-226-7499

E-mail: patent@davisandbujold.com